Amendment to the claims:

The following listing of claims replaces all prior listings.

Listing of Claims

Claims 1-21. (Cancelled).

22. (Currently Amended) A method comprising:

generating a unique internet protocol address from [[the]] a geographical location information ~~data~~, wherein the unique internet protocol address has a global prefix portion and a local suffix portion, and

wherein the geographical location information is coded in the local suffix portion of the unique internet protocol address, and wherein the generating is implemented by a physical device.

23. (Previously Presented) The method according to claim 22, wherein the geographical location information is a three dimensional coordinate.

24. (Previously Presented) The method according to claim 22, wherein the geographical location information is a two dimensional coordinate.

25. (Previously Presented) The method according to claim 22, wherein the geographical location information includes additional information.

26. (Currently Amended) The method according to claim 25, wherein the additional information is node specific information comprising one or more of a ~~such as~~ terminal number, a node name, a node layer information, a street address, a serial number, a color, [[or]] and a weight.

27. (Currently Amended) The method according to claim 22, wherein the unique internet protocol address, based on the geographic location information assigned to a mobile device, is updated when the mobile device moves and ~~said~~ a new address is informed to a register that controls the location of said mobile device.

28. (Currently Amended) The method according to claim 22, wherein the address assigned to a mobile device comprises a device number and geographical location information of a router to which the mobile device is connected [[to]].

29. (Previously Presented) The method according to claim 22, wherein the geographical location information is automatically detected.

30. (Previously Presented) The method according to claim 22, wherein the geographical information is manually entered.

31. (Currently Amended) The method according to claim 22, wherein the addressing of subnets of the a network is based on [[the]] a geographic location of one or more routers.

32. (Currently Amended) The method according to claim 22, wherein the unique internet protocol address is ~~addresses~~ [[are]] used to improve the network performance by using the geographic location information in directing [[the]] a radio signal to a destination when a radio is ~~radios are~~ used in a physical layer.

33. (Currently Amended) An apparatus comprising:

a router configured to route internet protocol packets in which a unique address is based on geographical location information and has a global prefix portion and a local suffix portion,

wherein the apparatus is configured to harness the geographic location information coded to the local suffix portion of the unique address in routing packets to destination nodes located in a subnetwork.

34. (Previously Presented) The apparatus according to claim 33, wherein the geographic location information is a three dimensional coordinate.

35. (Previously Presented) The apparatus according to claim 33, wherein the geographic location information is a two dimensional coordinate.

36. (Previously Presented) The apparatus according to claim 33, wherein the geographical location information includes additional information.

37. (Currently Amended) The apparatus according to claim 36, wherein the additional information is node specific information comprising one or more of a ~~such as~~ terminal number, a node name, a node layer information, a street address, a serial number, a color, [[or]] and a weight.

38. (Previously Presented) The apparatus according to claim 33, wherein the apparatus is configured to update the address assigned to a mobile device when the mobile device moves.

39. (Currently Amended) The apparatus according to claim 33, wherein the apparatus is configured to assign to a mobile device an address which consists of a

device number and a geographical location information of the [[a]] router to which the mobile device is connected [[to]].

40. (Previously Presented) The apparatus according to claim 33, wherein the apparatus is configured to query the geographic location information from a client attached to a network.

41. (Currently Amended) The apparatus according to claim 33, wherein the apparatus is configured to assign the geographic location information and a terminal device number to a client attached to a network.

42. (Currently Amended) The apparatus according to claim 33, wherein the apparatus is configured to utilize the geographic location information in directing [[the]] a radio signal to a destination when a radio is ~~radios~~ used in a physical layer.

43. (Canceled)

44. (Currently Amended) A unique internet protocol address embodied on a non-transitory computer-readable medium which when executed by a physical device provide operations comprising:

receiving, at the physical device, a packet comprising a global prefix portion and a local suffix portion,

wherein the unique internet protocol address is generated from geographical location ~~data~~ information of one of a node and a router connected to said node, and

wherein said geographical location information is coded in said local suffix portion of said unique internet protocol address.

45. (Currently Amended) A routing component comprising:

a router configured to route internet protocol packets,

wherein a unique internet protocol address is based on geographical location information of ~~one of~~ said routing component and a node connected to said routing component,

wherein said unique internet protocol address has a global prefix portion and a local suffix portion,

wherein said routing component is configured to utilize said geographic location information, said geographic location information being coded to said local suffix portion of said unique internet protocol address, in routing packets to one or more destination nodes located in a subnetwork.

46. (Currently Amended) A system comprising:

a router configured to route data packets between an internet and a subnetwork, said subnetwork comprising a group of nodes,

wherein a unique internet protocol address is based on geographical location information of ~~one of~~ said router and one node of said group of nodes, and

wherein said unique internet protocol address has a global prefix portion and a local suffix portion, said router being configured to utilize said geographic location information, the geographic location information being coded to said local suffix portion of said unique internet protocol address, in routing packets to destination nodes located in said subnetwork.

47. (New) The method of claim 1, wherein the physical device comprises at least one of the following: a node, a router, a mobile device, a client, and a routing element.